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09/509,280	03/20/2000	PETER ROWAN KELLOCK	SPR6147P0010	3713

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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/509,280	Applicant(s) KELLOCK ET AL.	
	Examiner Shawn S. An	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1-7, 9, 10, 15, 16, 19, 20, 22, 24-30, 32, 33, 38, 39, 42, 43, 45, 47-53, 55, 56, 60-62, 65, 66, 68 and 100-117.

Continuation of Disposition of Claims: Claims rejected are 1-7, 9, 10, 15, 16, 19, 20, 22, 24-30, 32, 33, 38, 39, 42, 43, 45, 47-53, 55, 56, 60-62, 65, 66, 68 and 100-117.

DETAILED ACTION

Response to Amendment

1. As per Applicant's instructions as filed on 9/20/07, a plurality of claims have been amended and canceled. See Applicant's Amendments to the Claims for detail.

Response to Remarks

2. Applicant's arguments with respect to amended claims have been carefully considered but are moot in view of the new ground(s) of rejection incorporating the previously cited prior art (Abecassis) reference.

As per Applicant's previous arguments (automatically obtaining descriptor values and using time series descriptors) regarding claims 105, 111, and 117, Abecassis discloses obtaining time series descriptors (Fig. 2B, 230; Figs. 3A-3C) in the form of time series data representing the value of a characteristic of the input video signal at each of a series of successive time periods (col. 8, lines 34-45; col. 23, lines 18-30), and manually obtaining descriptor values (Fig. 4, 423; Fig. 8C; col. 22, lines 62-67; col. 23, lines 1-14). Abecassis seems to obtain descriptor values manually as opposed to automatically.

However, MPEP 2144.04, III. Automating a Manual Activity clarifies that providing an automatic means to replace a manual activity, **which accomplishes the same result**, is not sufficient to distinguish over the prior art. Please refer to:

In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958).

Therefore, the Examiner maintains the previous grounds of rejection for claims 105, 111, and 117.

Moreover, Applicant's arguments with respect to the 101 rejection (see below) are not persuasive. The Examiner had a telephone discussion with Applicant's Attorney, William McLaughlin, to resolve the 101 rejection problems, but was unsuccessful. Therefore, the Examiner maintains the previous 35 USC § 101 rejection.

Furthermore, upon further review, Claims 1 and all of its dependent claims, and claim 105 are rejected under 35 U.S.C. 112, second paragraph (see also below).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-7, 9-10, 15-16, 19-20, 22, 47-53, 55-56, 60-62, 65-66, 68, 100-105, and 112-117 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 47 and all of its dependent claims and claim 117 reciting a computer program product are considered non-statutory subject matter, since Applicant identifies the computer program product as a signal (Applicant; page 36, lines 5-11).

Claim 1 and all of its dependent claims and claim 105 reciting a system are considered non-statutory subject matter, since Applicant indicates the system described with reference to Figures 1 to 10 may be implemented as software, or a computer program, executing on the computer (Applicant; page 35, lines 7-9).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1 and all of its dependent claims, and claim 105 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The "means" as recited in claims 1 and 105 lack substantial tangible device(s) for representation.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1-2, 7, 9, 15-16, 19-20, 24-25, 30, 32, 38-39, 42-43, 47-48, 53, 55, 60-62, 65-66, 103-105, 109-111, and 115-117 are rejected under 35 U.S.C. 102(e) as being anticipated by Abecassis (6,067,401).

Regarding claims 1, 9, 20, 24, 32, 43, 47, 55, 60, and 66, Abecassis discloses a system/method and a computer program code means (col. 4, lines 56-65) for processing video segment, comprising:

computerized digital signal processing means for automatically performing one or more digital signal processing algorithms implemented in computer hardware or software on visual data comprised in the input video material to obtain/derive at least one descriptor value (Fig. 2; Note: default setting for a descriptor value assigned is always 1 or none, implying the absence of an element; see also generalized descriptive rating) for each of a plurality of first descriptors for each of a plurality of segments of the input video material (Figs. 5 and 8C; col. 8, lines 23-33 and 46-60);

user-interface means enabling a user to combine the descriptor values of first descriptors in order to create descriptor values for at least one further descriptor (Figs. 2A-2D and 3A-3C; col. 7, lines 29-42; col. 8, lines 61-67; col. 9, lines 1-6 and 49-65);

user-interface means enabling a user to choose from among the first/further descriptors one or more descriptors to be used for automatic segment selection (col. 5, lines 8-14; col. 9, lines 49-65; col. 10, lines 59-65; col. 19, lines 54-67);

user-interface means enabling a user to define/choose a segment selection rule to be used for automatic segment selection (Fig. 8C, 824; col. 5, lines 8-14; col. 19, lines 54-67; col. 22, lines 62-67; col. 23, lines 1-14);

automatic selection means for using the define/chosen selection rule and the descriptor values to select, from among the plurality of video segments, at least two video segments of the video material (Fig. 8C, 824-825; col. 23, lines 1-14);

automatic sequencing means for using a sequencing (Fig. 8C, 824) rule and the descriptor values of the selected descriptors for at least two selected video segments to derive a sequencing order in which to present the at least two video segments, wherein two selected segments are permuted in the sequencing order (non-sequential) relative to the sequence of the at least two segments in the input video material (col. 23, lines 1-14);

assembly means for assembling (Fig. 8C, 825) an output video production by including the selected video segments in the sequencing order; and

playback means which plays the output production (abs.), whereby a user may create and view different output production by repeatedly applying different combinations of descriptors and selection rules (Fig. 4; col. 10, lines 45-58).

Regarding claims 105, 111, and 117, Abecassis discloses a system/method and a computer program code means (col. 4, lines 56-65) for creating an output video production from an input video signal, comprising:

means for obtaining at least time two time series descriptors in the form of time series data representing the value of a characteristic of the input video signal at each of a series of successive time periods (Fig. 2B, 230; col. 8, lines 34-45);

means for using at least one of the time series descriptors for deriving a set of segment boundary times defining a plurality of segments of the input video signal, (Fig. 2B, 230; col. 8, lines 33-45).

means for applying a descriptor reduction rule (220, TABLE Category) to at least a second one of the time series descriptors to obtain automatically at least one segment descriptor for each of the segments of the input video signal (Fig. 8C; col. 22, lines 62-67; col. 23, lines 1-14), wherein the segment descriptors have a single value (Fig. 2B, see 1, 2, 3, and/or 4) for each respective segment of the input video signal;

means for using a selection rule and the descriptor values to select, from among the plurality of video segments, at least two segments (Fig. 8C, 825); and

means for assembling (Fig. 8C, 825) an output video production by including the selected video segments.

Regarding claims 2, 25, and 48, Abecassis discloses two grids corresponding to representations of the at least two video segments for a first/second axis, wherein each cell in the grid displays a value ascribed to one of at least one descriptors (Fig. 2A).

Regarding claims 7, 30, and 53, Abecassis discloses importing a descriptor and at least one value ascribed thereto prior to importation into the system (Fig. 2A).

Regarding claims 15, 38, and 61, Abecassis discloses means for segmenting a video input by enabling definition or adjustment of start and end times of a video segment by direct user manipulation (Fig. 1).

Regarding claims 16, 39, and 62, Abecassis discloses means (Fig. 2A) for deriving a single value from a plurality of values of a descriptor corresponding to video segments.

Regarding claims 19, 42, and 65, Abecassis discloses providing playback of the output video production (abs.).

Regarding claims 103, 109, and 115, Abecassis discloses:

means for obtaining a first descriptor value for each of segments (Fig. 2);

means for ascribing at least one second descriptor value to at least a first of the segments (823); and

means for grouping the first segment with at least one other of the segments according to the values of the first descriptor value (825); and

means for selectively copying the second descriptor value to one or more other segment (abs.).

Regarding claims 104, 110, and 116, Abecassis discloses:

incorporating additional descriptors (col. 7, lines 29-42; col. 8, lines 61-67; col. 9, lines 1-6 and 49-65);

display means for allowing a user to view the output production (Fig. 8C, see VIEW);

data input means for receiving instructions from the user to perform at least one of the descriptor values (Fig. 9, 933); and

a modified output production based on the modified descriptor values (941).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-6, 10, 22, 26-29, 33, 45, 49-52, 56, 68, 100-102, 106-108, and 112-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis (6,067,401).

Regarding claims 3, 26, and 49, Abecassis discloses a row visually representing at least two video segments, and time-series graphical representation of a plurality of values of a descriptor corresponding to one of at least two video segments, wherein the temporal (230) extent of each of the at least two video segments is indicated (Fig. 2B).

Abecassis does not particularly disclose an audio content of the video segments.

However, the Examiner takes official notice that a row comprising an audio content of the video segments is well known in the art (see also UK 2,329,812).

Therefore, it would have been obvious to a person of ordinary skill in the art employing a system for processing video segment as taught by Abecassis to incorporate the well known concept of audio content of the video segments for the purpose of an audio editing.

Regarding claims 4, 27, and 50, Abecassis discloses first and second grids, wherein a change to the original first grid causes a corresponding change to the second grid (Fig. 2).

Regarding claims 5-6, 28-29, and 51-52, the Examiner takes official notice that creating dissolve or an audio cross fade is a well known feature in a scene analysis.

Therefore, it would have been obvious to a person of ordinary skill in the art employing a system for processing video segment as taught by Abecassis to incorporate the well known concept as discussed above for the purpose of creating a smooth transitions between two video segments.

Regarding claims 10, 33, and 56, the Examiner takes official notice that it is an obvious feature to include a formula or algorithm having a reference to at least one other descriptor so as to compare the reference descriptor value with a desired change value by a user.

Regarding claims 22, 45, and 68, the Examiner takes official notice that conventionally deriving a target or a reference or a threshold value is well known in the art as a comparison basis to define a certain condition for a data/value.

Therefore, it would have been obvious to a person of ordinary skill in the art employing a system for processing video segment as taught by Abecassis to sequence video segments according to the difference between values of at least one descriptor and a target value.

Regarding claims 100-101, 106-107, and 112-113, since Abecassis discloses selecting and sequencing at least two video segments, it would have been obvious to

apply a predetermined set of selection and sequencing rules as a set of guideline for selecting and sequencing video segments.

Regarding claims 102, 108, and 114, Abecassis discloses obtaining at least two time series descriptors in the form of two time series data (Fig. 2B, 230) for deriving a set of boundary times defining the segments of the input video signal, and further discloses that an editor has complete control as to the video material to which a viewer is exposed such as time, and amount of viewing control (col. 8, lines 34-45; col. 23, lines 15-30).

Therefore, it would have been obvious to obtain at least one descriptor value for each segment of the input video signal automatically by using at least a second of the time series descriptors as an efficient way to obtain descriptor values.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 571-272-7324.

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13. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SHAWN AN
PRIMARY EXAMINER

12/10/07